



## IRFTS PERGOLAS

# USER MANUAL

Congratulations on your purchase of an IRFTS photovoltaic and upgradable pergola!

IRFTS pergolas create unique living spaces, combining well-being and warmth, high technology and ecology.

As such, you are now in possession of a pleasant relaxation space, that will protect you from the deleterious effects of the sun, while optimally exploiting its rays to generate your daily electricity.

This is France's first 2-in-1 pergola!

## Description

Your pergola's roof is totally sealed. Rainwater is drained through the feet, potentially feeding a rainwater tank if you have one.

Depending on the chosen and adapted configuration, the pergola possesses an electricity-generating photovoltaic and/or bioclimatic (adjustable blades) roof capable of regulating air and light flow.

To enhance and extend your outdoor comfort, our pergolas can be upgraded with lighting, screens and heating options, all of which can be added at any time in the pergola's life.

Your customised pergola is delivered ready-to-use by your fitter. Do not hesitate to contact the latter for further information concerning your pergola's operation.

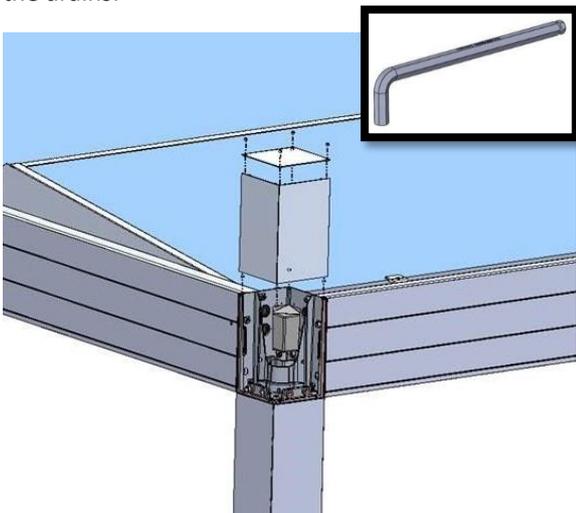
## Maintenance and cleaning

Regularly check that the pergola's drains are not cluttered or obstructed, particularly with plant debris. Unblock and clean the gutters and drainage holes if necessary.

Cleaning frequency will depend upon the pergola's immediate vicinity, in particular the presence of nearby trees. The pergola should be cleaned at least once per year, preferably at the end of winter.

The gutters can be cleaned with a hosepipe, taking care not to directly spray the electrical and electronic devices.

Depending on the chosen model of pergola, the upper angles can be removed with a hex wrench to facilitate cleaning the drains:



The structure of the pergola can be cleaned with clear water, without adding any aggressive chemicals. To avoid scratching the structure, use a soft cloth or sponge.

The structure of the IRFTS pergola is not designed to be exposed to sea air.

Do not perform any welding, grinding or metal cutting work near your pergola's structures as you could damage its profiles.

Call on the services of qualified personnel for any work on the pergola and its accessories.

# Photovoltaic

## Precautions for use:

All photovoltaic systems must be regularly monitored and cleaned. The NF EN 62 446-1 standard details the maintenance procedure to follow. To this end, your installer can provide you with a maintenance contract. If you are interested please ask them for details.

All maintenance and repair operations on IRFTS products must be carried out by qualified technicians. These operations require electrical skills.

In the case of a maintenance or repair operation that requires the removal of a photovoltaic module, the electric disconnection and reconnection procedure applicable for the replacement of a module must be adhered to.

- **Photovoltaic field maintenance**

At least once a year, preferably before summer to optimise electricity production as part of pergola maintenance:

- ✓ The photovoltaic modules should be cleaned with a hosepipe, without using pressure or a concentrated stream of water
- ✓ Visual inspection, spotting damage
- ✓ Check the wiring
- ✓ Check the fixing points: check that all the screws and bolts are present and properly fixed in place

- **Electrical maintenance**

If, once the real amount of sunshine has been taken into account, a measurable reduction in yearly production from one year to the next is observed, the inverter and the individual modules should be checked to see if they are working properly.

- **Module replacement**

If the glass of the photovoltaic panel or the panel itself is damaged or malfunctions, please follow this procedure:

1. Disconnect the inverter(s) from the network by opening the AC circuit breaker located between the inverter(s) and the meter.
2. Disconnect the photovoltaic field by opening the DC switch/breaker located between the modules and the inverter. If the system is equipped with micro-inverters they automatically disconnect the photovoltaic field after step 1.
3. Dismantle the parts of the assembly system in reverse installation order to gain access to the module's wiring. Never withdraw the connectors in the rain.
4. Assemble the new module in compliance with its installation instructions (see *Installation instructions*). Reconnect the equipotential connection to the new installed module.
5. Check that the modules concerned are working properly:
  - a. Measure their open-circuit voltage range
  - b. Check the compatibility of this range with the inverter's input range
6. Reconnect the photovoltaic field by closing the DC switch/breaker (except if there are micro-inverters), then the AC circuit breaker.

## Photovoltaic connection and production

The photovoltaic system fitted with your pergola produces electricity from the energy derived from the sun's rays. This electricity can either be consumed on-site, allowing you to reduce your electricity bills, sold to EDF or any other approved operator, according to the terms laid out by the Government, or a mix of both solutions.

In all cases, ensure that you have taken the necessary steps with your grid system operator (Enedis or local distribution company) to obtain authorisation for connection to the electrical grid and with EDF for the sale of the electricity produced. Your fitter should assist you with these procedures.

For further information concerning photovoltaic systems and their operation, we recommend that you visit the national resource site [www.photovoltaique.info](http://www.photovoltaique.info).

## Remote control

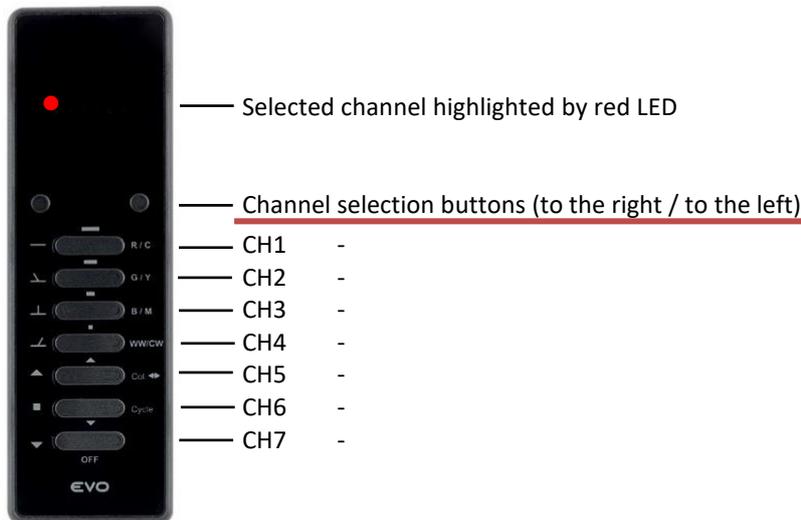
The IRFTS pergola options can be controlled via a remote control.

All options can be controlled from a single remote control. For this, each option corresponds to a specific remote control channel.

### Changing channel on the remote control:

The selected channel is identified by a red LED at the top of the remote control.

To change channel, use the right-hand channel selection button to select channels to the right, or the left-hand button to move to channels to the left.



### Limiting the number of channels on your remote control:

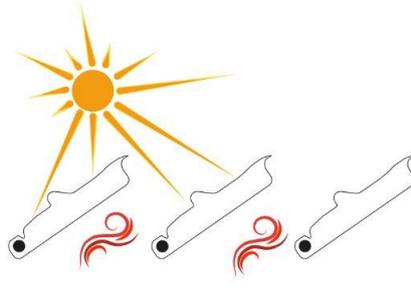
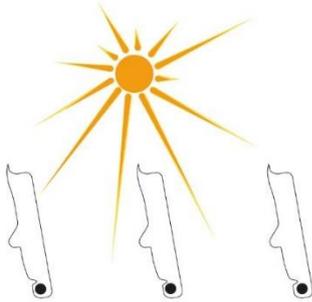
To enable the Limit Channels function, press the channel selection button to go to the highest channel number to use. Once reached, hold the button down for 5 seconds. Channel limitation is indicated by the simultaneous flashing of all the group's LEDs. To disable the Limit Channels function, press the channel selection button for 5 seconds until all LEDs flash.

### Warnings:

- Your fitter will connect all radio receivers for controlling the optional devices, and for configuring the remote control for each of these options. If necessary, contact a qualified technician and see the option's user manual. Electrical connection systems must be correctly sized and suited to their intended use, as per applicable electrical standards.
- Do not use the remote control at locations or facilities that are susceptible to radio emissions (e.g.: airports, hospitals, etc.).
- Do not store or use the remote control in a place that is damp, where there is steam, with high ambient humidity, dust, in direct sunlight or under similar ambient conditions.
- Place the remote control in a stable location such that it doesn't fall: dropping the remote control could damage it or reduce its range of action.
- Signal reception by this device can be disrupted by various factors: The presence of an interfering electrical frequency in the same environment as the remote control and of the same frequency. Similarly, placing the device inside a container made of metal or shielded by metal sheet can disrupt the signal. Use only plastic containers.
- Replacing the battery: Keep batteries out of the reach of children. If a battery is swallowed, seek immediate medical advice. An incorrectly replaced battery can cause an explosion hazard. Replacement batteries should be of the CR 2430 type only. Immediately discard damaged or spent batteries in accordance with applicable

standards. Do not dispose of batteries in household waste. Always take to an appropriate collection point. To replace the batteries: remove the spent batteries and insert the new ones. Make sure you observe the battery poles (+/-)!

## Directional bioclimatic blades (option)



The bioclimatic blades are directional shutters that allow you to adjust the amount of sunlight to your terrace to climatic conditions or as desired.

In the event of high heat, opening the blades only slightly ensures pleasant air circulation, while shielding you from direct sunlight.

In the event of rain, the blades, which are perfectly watertight when closed, protect your possessions and provide a sheltered outdoor space.

### Precautions for use:

- **Snow:** The structure is designed to be fitted in snow-prone areas. In its closed position, it can bear up to between 130 and 180 kg/m<sup>2</sup> of snow load (depending on model). In the event of heavy snowfall or significant snow build-up, we recommend either tilting the blades to avoid snow build-up on the roof, or regularly clearing the snow from the roof to avoid excess load.
- **Wind:** In its closed position and if correctly anchored, the structure can withstand wind gusts of up to between 125 and 145 kph (depending on model). In the event of strong winds, and even if it is raining, we recommend opening the blades at an angle (e.g. 45°) to limit the uplift force incurred by the structure.

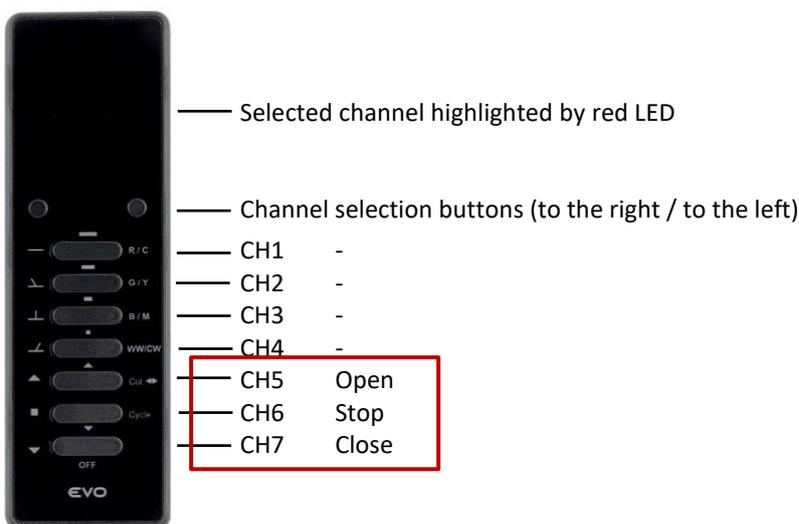
### Maintenance

Clean the blades in their closed position with clear water, using a soft cloth or sponge.

Do not lubricate the blade shafts.

### Remote control operation:

Select the channel corresponding to the option and use buttons CH5 to CH7 as indicated below.



## Lighting (option)



Lighting (LED strip or LED spotlights) intensity can be varied for greater comfort. You can thus adapt the brightness as required or desired.

The LED strips and spotlights can be controlled independently from different channels.

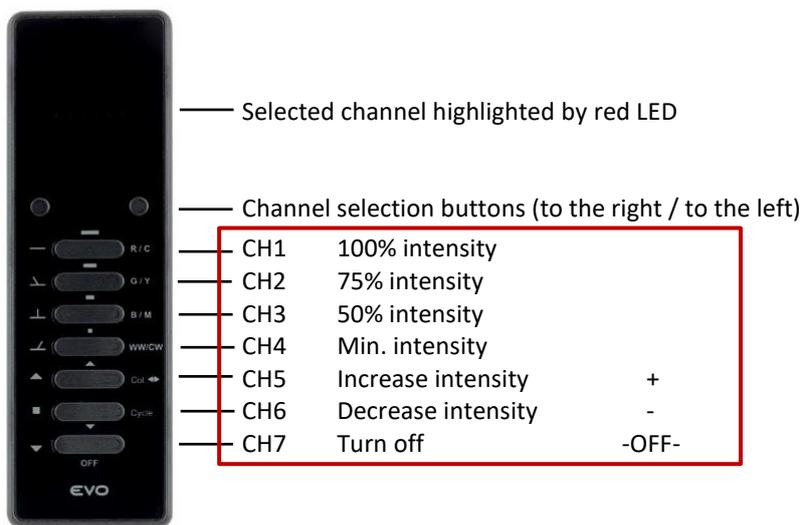
All lighting options are controlled in the same manner.

### Maintenance

Clean the outer surface of the LED strip and LED spotlights, only when the latter are turned off, using a slightly damp soft cloth.

### Default remote control operation:

Select the channel corresponding to the option and use buttons CH1 to CH7 as indicated below.



### Changing the preset brightness values:

1. Press the button corresponding to the value to change (CH1, CH2, CH3 or CH4)
2. Adjust the value using button CH5 (more intensity) or CH6 (less intensity)
3. Press and hold CH7 for 5 seconds to save the newly defined intensity

## Screen (option)

### Precautions for use:

The screen provides effective protection from wind, UV radiation and heat. To ensure greater comfort, the screen's cloth reflects 96% of incident radiation, thus limiting the effects of heat and glare, while ensuring maximum ambient brightness.

The screen is weather and UV resistant, providing a durable and high-quality space.

The screen possesses a wind resistance rating of 3 (the highest), and is capable of withstanding force 6 wind, i.e. 49 km/h (Beaufort wind scale). You can thus use the screen to shield yourself from the wind as needed. In the event of strong gusts of wind, however, the screen should be raised to avoid damage.

Before lowering the screen, ensure that there are no obstacles that could impede its travel.



### Maintenance

Handle the fabric with care: clean and dry hands. Do not scrub. Do not use solvents or abrasive substances that could damage the fabric's coating.

All chemicals could potentially cause permanent damage to the fabric. Take care to fully raise the screen when using detergents in the vicinity of the pergola, in order to avoid any chemical spatter on the fabric.

Cleaning the screen: Remove dust with a vacuum cleaner or with compressed air. Avoid rubbing or deforming the fabric. Clean with a sponge soaked with clear water and allow to dry fully with the screen extended.

### Remote control operation:

Select the channel corresponding to the option and use buttons CH5 to CH7 as indicated below.



— Selected channel highlighted by red LED

— Channel selection buttons (to the right / to the left)

— CH1 -

— CH2 -

— CH3 -

— CH4 -

— CH5 Open



— CH6 Stop

— CH7 Close



## Heating (option)

### Precautions for use:

The heating apparatus should be fitted as per the following indications: it should be fitted onto a surface that will not be damaged by the high temperatures generated; it should be positioned in a sufficiently well-ventilated location; it MUST NOT be hermetically enclosed; it should be positioned vertically with the cable guides at the bottom; the connecting wires should be protected in suitable cable ducts; do not cover the apparatus; do not use or leave flammable materials/substances in the vicinity of the apparatus.

Caution: if the power supply cable is damaged, it must be replaced by qualified personnel only in order to prevent any risks.

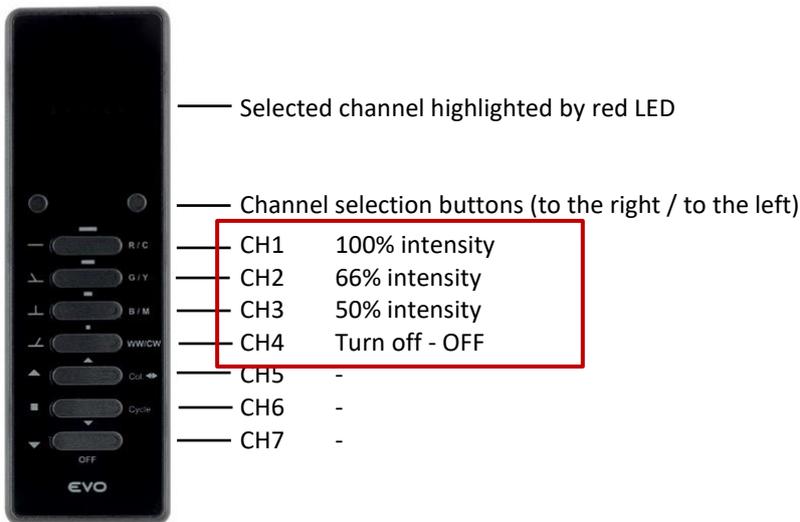
This apparatus is not intended to be used by individuals (including children) with reduced physical, sensory or mental capacity, or who have not been fully informed of the product's characteristics and associated potential hazards. Supervise children to ensure that they do not play with the apparatus. Do not touch the apparatus with wet hands, or with metal or flammable objects. Do not open, disassemble or repair the apparatus without first contacting qualified personnel.

### Maintenance

Once the apparatus has been turned off and is cool, dust the outside of the apparatus with a dry cloth.

### Remote control operation:

Select the channel corresponding to the option and use buttons CH1 to CH4 as indicated below.



## Daisy control application

You can also control your pergola from your smartphone or tablet using the DAISY application.

For this, your pergola must be equipped with the DAISY WI-FI interface. Ask your fitter or any qualified professional to equip your pergola with DAISY WI-FI and to configure the interface.

Download the DAISY app from the App Store or the Google Play Store. You should first check that your device is compatible.

Create your account. For this, your smartphone must have Internet access. Wait for your confirmation email, log in and enjoy!

## Product recycling and disposal

At the end of the operating life of this product or one of its accessories, it must not be discarded as household waste. Indeed, it should be taken to an appropriate waste electrical and electronic equipment collection point. The user is responsible for discarding this equipment via appropriate channels at the end of its operating life. Failure to observe this instruction may render you liable to penalties provided for by waste disposal laws.

In accordance with the Environment Code on Waste Electrical and Electronic Equipment (WEEE), some components, including the photovoltaic modules, are collected by professionals for recycling.

## Warranties

### **Manufacturer's ten-year warranty**

In accordance with our General Terms of Sale, our pergolas are covered by a manufacturer warranty intended to guarantee their compliance and ensuring refund of the purchase price, replacement free of charge, or repair free of charge, as deemed most appropriate by IRFTS.

This warranty is of 10 years for the pergola structures.

**Materials:** The load-bearing structure of our pergolas is made from 6063 grade aluminium.

**Colorimetry:** The powder coating on IRFTS pergolas conforms to the QUALICOAT® standard, certifying that the powder coating of products and components used in an exterior architecture responds positively to a series of standardised tests.

### **Other warranties**

Motorisation, transmission and electronic control accessories are guaranteed for a period of 2 years.

Lighting elements are guaranteed for a period of 2 years.

Screen fabrics are guaranteed for a period of 5 years.

Heating elements are guaranteed for a period of 2 years.

These warranties do not cover defects arising from abnormal or inappropriate use, or resulting from a cause external to the intrinsic qualities of the products.

In no event will IRFTS be held liable beyond the warranty period of its suppliers, particularly for accessories, motorisation units, modules and photovoltaic inverters.

For all claims, please contact as rapidly as possible the fitter who installed your pergola such that they may engage the manufacturer warranty.

For further information on the terms of our manufacturer warranty, please see the IRFTS General Terms of Sale.

IRFTS would like to thank you for your trust.

Find us at [www.mapergolasolaire.com](http://www.mapergolasolaire.com)

